

Work Order ID 69799

July-03-12 1:04:37 PM

69799

Page 1

Item ID: D6008-132

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Crosstube extrusion

Start Date: 5/19/11 Start Qty: 20.00

20

Cust Item ID:

Required Date: 7/12/12 Req'd Qty: 20.00

20

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D6008	Rev A

100 PURCHASING 0.00

100

Purchasing

Purchasing

Memo

Issue P/O:

- 14138
- a) Order as per Dwg D6008
 - b) Material: 3.250 x 0.438 wall 7075-T6/T6511 (WW-T-700/7 or QQ-A-225/9 or QQ-A-200/11) seamless aluminum tube
 - c) Minimum ultimate tensile strength = 77 ksi
 - d) Minimum tensile yield strength = 66 ksi
 - e) Tolerance are per ASTM B210 (see details on Dwg D6008)
 - f) Material certification required

0.00

17-05-19

110 Receive & Inspect for Damage & Mat'l Certs 0.00

110

Packaging

Packaging

Memo

Ensure material certification is attached

0.00

20
11-11-18

Work Order ID 69799

July-03-12 1:04:37 PM

69799

Page 2

Item ID: D6008-132 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Crosstube extrusion
Start Date: 5/19/11 Start Qty: 20.00 ***20*** Cust Item ID:
Required Date: 7/12/12 Req'd Qty: 20.00 ***20*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC6- Inspect dimensions to drawing Memo Ensure Material certification comply to Dwg D6005	0.00 0.00		5	12/10/10	(20)			
130 *130* Packaging Packaging	Identify as per dwg & Stock Location: 46 Memo	0.00 0.00						12-10-18	(8)
140 *140* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.00						12/12/11	(8)

UMP
12-12-10

Picklist Print

July-03-12 1:04:36 PM

Page 1

Work Order ID: 69799
 Parent Item: D6008-132
 Parent Item Name: Crosstube extrusion

Start Date: 5/19/11
 Start Qty: 20.00
 Required Date: 7/12/12
 Required Qty: 20.00

Comments: IPP Rev:A New Issue 07-06-18 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6008-132P Crosstube extrusion		Purchased	No			110	Each	20.0000	1	20			
				<u>Location</u>	<u>Loc Qty</u>		<u>Loc Code</u>						
				lhall	20								
				69799	20								

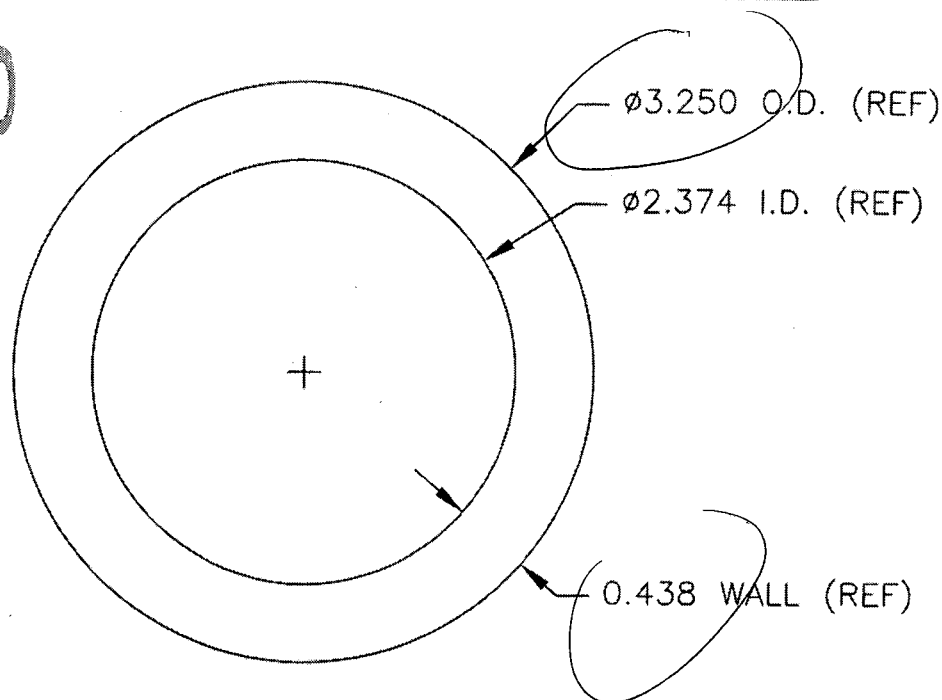
Copy to 18
(20)



DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>#</i>	APPROVED <i>#</i>	DRAWING NO. D6008	REV. A SHEET 1 OF 1
DATE 00.11.17		TITLE CROSSTUBE MATERIAL	SCALE 1:1
A	00.11.17	NEW ISSUE	

SPECIFICATION CONTROL DRAWING

RELEASED
00.11.24 *#*



NOTES

- 1) D6008-XXX CROSSTUBE
LENGTH

WHERE XXX IS LENGTH IN INCHES
EG. 180" LONG TUBE: D6008-180

- 2) MATERIAL: 3.250 OD x 0.438 WALL 7075-T6/T6511 (WW-T-700/7 OR QQ-A-225/9 OR QQ-A-200/11) SEAMLESS ALUMINUM TUBE.
MINIMUM ULTIMATE TENSILE STRENGTH = 77 ksi
MINIMUM YIELD TENSILE STRENGTH = 66 ksi
- 3) TOLERANCES ARE PER ASTM B210 AS FOLLOWS:
O.D.: ± 0.008 MEAN (± 0.016 INCLUDING OVALITY)
WALL: ± 0.020 MEAN (± 0.044 INCLUDING ECCENTRICITY)
LENGTH: XXX $+0.125/-0.000$
STRAIGHTNESS: 0.010" DEVIATION / 12" LENGTH
- 4) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 5) CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

Copyright © 2000 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

EXTRUSION INSPECTION SHEET

							ULTRA SONIC MEASUREMENTS				
TUBE #	TOTAL LENGTH	DIA two readings	INSIDE DIA	wall thickness measured w/vern	Strightness at 12"	Rockwell Reading	LOCATION on tube	R1	R2	R3	R4
DWG	132.00"	3.250" OD	2.374" ID	0.438"	0.010"	N/A	66" Middle				
1	132.00"	3.249"/3.243"	2.369"	0.431"/0.441"	0.022"	N/A	66" Middle	0.453"	0.444"	0.446"	0.453"
2	132.00"	3.245"/3.251"	2.365"	0.431"/0.444"	0.035"	N/A	66" Middle	0.450"	0.453"	0.446"	0.442"
3	132.00"	3.247"/3.249"	2.365"	0.38"/0.441"	0.012"	N/A	66" Middle	0.446"	0.446"	0.449"	0.448"
4	132.00"	3.251"/3.246"	2.364"	0.465"/0.423"	0.030"	N/A	66" Middle	0.441"	0.457"	0.446"	0.438"
5	132.00"	3.256"/3.252"	2.362"	0.452"/0.440"	0.029"	N/A	66" Middle	0.450"	0.450"	0.448"	0.448"
6	132.00"	3.243"/3.247"	2.360"	0.438"/0.444"	0.032"	N/A	66" Middle	0.451"	0.446"	0.446"	0.448"
7	132.00"	3.243"/3.249"	2.363"	0.439"/0.443"	0.034"	N/A	66" Middle	0.436"	0.451"	0.455"	0.444"
8	132.00"	3.252"/3.244"	2.356"	0.451"/0.437"	0.029"	N/A	66" Middle	0.444"	0.446"	0.446"	0.449"
9	132.00"	3.242"/3.238"	2.358"	0.444"/0.438"	0.034"	N/A	66" Middle	0.435"	0.449"	0.455"	0.444"
10	132.00"	3.252"/3.249"	2.358"	0.452"/0.435"	0.032"	N/A	66" Middle	0.442"	0.448"	0.448"	0.444"
11											
12											
13											
14											
15											
PART # D6008-132		P/O# 14138		BATCH # 69779		Notes: tube #4 found to have a wall tickness issue see attached sheet					

EXTRUSION INSPECTION SHEET

		SIDE A	SIDE B			SIDE A / B		ULTRA SONIC MEASUREMENTS				
TUBE #	TOTAL LENGTH	DIA two readings	DIA two readings	INSIDE DIA	wall thickness measured w/vern	Strightness at 12"	Rockwell Reading	LOCATION on tube	R1	R2	R3	R4
DWG							N/A	Middle	N/A			
1		3.245 / 3.252	2.242 / 2.246	2.360	2.432 / 2.454	.024 / .012	N/A	Middle				
2		3.240 / 3.245	2.231 / 2.245	2.360	.440 / .443	.011 / .000	N/A	Middle				
3		3.243 / 3.244	2.246 / 2.241	2.360	.440 / .436	.010 / .015	N/A	Middle				
4		2.251 / 2.249	2.246 / 2.251	2.360	.444 / .447	.015 / .013	N/A	Middle				
5		2.245 / 2.250	2.247 / 2.243	2.364	.436 / .445	.023 / .010	N/A	Middle				
6		2.243 / 2.248	2.239 / 2.244	2.363	.436 / .447	.012 / .017	N/A	Middle				
7		2.244 / 2.240	2.246 / 2.251	2.360	.440 / .444	.020 / .012	N/A	Middle				
8		2.245 / 2.247	2.243 / 2.246	2.360	.441 / .445	.024 / .012	N/A	Middle				
9		2.241 / 2.244	2.243 / 2.246	2.360	.439 / .448	.033 / .012	N/A	Middle				
10		2.241 / 2.243	2.243 / 2.249	2.364	.437 / .448	.041 / .020	N/A	Middle				
11		2.246 / 2.251	2.245 / 2.247	2.363	.447 / .437	.037 / .010	N/A	Middle				
12		2.241 / 2.245	2.240 / 2.247	2.362	.435 / .441	.042 / .037	N/A	Middle				
13		2.244 / 2.249	2.251 / 2.244	2.361	.437 / .445	.044 / .012	N/A	Middle				
14		2.246 / 2.250	2.245 / 2.248	2.363	.439 / .445	.047 / .000	N/A	Middle				
15		2.250 / 2.247	2.244 / 2.246	2.360	.438 / .443	.052 / .020	N/A	Middle				
16		2.249 / 2.246	2.243 / 2.249	2.360	.436 / .445	.049 / .018	N/A	Middle				